

CLAIM AMENDMENT

Please amend the claims as follows

1. (Currently amended) A method for producing a transformed maize plant comprising the steps of:

inserting ~~into a transformable maize tissue~~ a nucleic acid comprising a selectable marker gene into a transformable maize tissue by inoculating the transformable maize tissue with *Agrobacterium* containing the nucleic acid, wherein the transformable maize tissue comprises an immature maize embryo to obtain a transformed maize tissue;

obtaining a transformed maize tissue;

culturing the transformed maize tissue for a period of time from about 7 days to about 42 days at a temperature of from 30°C to about 34°C in a selection media containing a selection compound that inhibits the growth of non-transformed maize tissue and permits the continued growth of transformed maize tissue;

identifying and selecting transformed maize tissue that grows in the selection media; and

regenerating a transformed maize plant from the selected transformed maize tissue.

2. (Original) The method of claim 1 wherein the period of time in the selection media is between about 7 days and about 28 days.

3. (Canceled).

4. (Previously presented) The method of claim 1 wherein the selection temperature is 30°C.

5. (Currently amended) The method of claim 1 wherein the selection temperature is maintained for a period of time between [[of]] about [[1-]] 7 days and about 14 days.

6. (Original) The method of claim 1 wherein the selection is performed in a single vessel without replacing or replenishing the selection media during the selection period.

7. (Original) The method of claim 1 wherein the selection compound is a herbicide.

8. (Original) The method of claim 7 wherein the herbicide is selected from the group consisting of glyphosate, bialaphos, phosphinotricin or Basta.

9. (Canceled)

10. (Currently amended) The method of claim 1[[9]] wherein the *Agrobacteri~~a~~[[um]]* inoculation is performed for less than about 20 minutes.

11. (Currently amended) The method of claim 1[[9]] wherein the *Agrobacteri~~a~~[[um]]* inoculation is performed by contacting the transformable maize tissue with filter paper saturated with the *Agrobacteri~~a~~[[um]]* containing the nucleic acid.

12. (Original) The method of claim 11 wherein the filter paper contacts the transformable maize tissue for between about 5 and about 60 minutes.

13. (Currently amended) The method of claim 1[[9]] wherein the *Agrobacteri~~a~~[[um]]* inoculation is performed by spotting the maize tissue with about 1 μ L of *Agrobacteri~~a~~[[um]]* containing the nucleic acid.

14. (Original) A transgenic maize plant produced by the method of claim 1.

15. (Withdrawn) A method for producing a transformed wheat, rice, barley, or sorghum plant comprising the steps of:

inserting into a transformable wheat, rice, barley, or sorghum tissue a nucleic acid comprising a selectable marker gene to obtain a transformed cereal tissue;

culturing the transformed tissue for a period of time from about 7 days to about 42 days at a temperature of from 30°C to about 34°C in a selection media containing a selection compound that inhibits the growth of non-transformed tissue and permits the continued growth of transformed tissue;

identifying and selecting transformed tissue that grows in the selection media; and
regenerating a transformed plant from the selected transformed wheat, rice, barley, or sorghum tissue.

16. (Withdrawn) The method of claim 15 wherein the period of time in the selection media is between about 7 days and about 28 days.

17. (Canceled).

18. (Withdrawn) The method of claim 15 wherein the selection temperature is 30°C.

19. (Withdrawn) The method of claim 15 wherein the selection temperature is maintained for a period of about 1-14 days.

20. (Withdrawn) The method of claim 15 wherein the selection is performed in a single vessel without replacing or replenishing the selection media during the selection period.

21. (Withdrawn) The method of claim 15 wherein the selection compound is a herbicide.

22. (Withdrawn) The method of claim 21 wherein the herbicide is selected from the group consisting of glyphosate, bialaphos, phosphinotrichin or Basta.

23. (Withdrawn) The method of claim 15 wherein the nucleic acid is inserted into the tissue by inoculation with an *Agrobacterium* containing said nucleic acid.

24. (Withdrawn) The method of claim 23 wherein the *Agrobacterium* inoculation is performed for less than about 20 minutes.

25. (Withdrawn) The method of claim 23 wherein the *Agrobacterium* inoculation is performed by contacting the transformable tissue with filter paper saturated with the *Agrobacterium* containing the nucleic acid.

26. (Withdrawn) The method of claim 25 wherein the filter paper contacts the transformable maize tissue for between about 5 and about 60 minutes.

27. (Withdrawn) The method of claim 23 where in the *Agrobacterium* inoculation is performed by spotting the tissue with about 1 µL of *Agrobacterium* containing the nucleic acid.

28. (Withdrawn) A transgenic wheat, rice, barley, or sorghum plant produced by the method of claim 15.

29. (Withdrawn) A method for increasing the transformation efficiency of a cereal transformation process comprising limiting the anaerobiosis effect during the inoculation of *Agrobacterium* to the transformable cereal tissue.

30. (Previously presented) The method of claim 1, wherein the transformable maize tissue is an immature embryo and the nucleic acid is inserted by inoculation with an *Agrobacterium* containing said nucleic acid.

31. (New) A method for producing a transformed maize plant comprising the steps of:
inserting a nucleic acid comprising a selectable marker gene into a transformable maize tissue by inoculating the transformable maize tissue with *Agrobacteria* containing the nucleic acid, wherein the transformable maize tissue comprises an immature maize embryo;
obtaining a transformed maize tissue;
culturing the transformed maize tissue at a first temperature for a first period of time and at a second temperature for a second period of time in a selection media containing a selection compound that inhibits the growth of non-transformed maize tissue and permits the continued growth of transformed maize tissue, wherein the first temperature ranges from about 30°C to about 34°C and the second temperature is about 27°C, and wherein the first period of time ranges from about 7 days to about 42 days and the second period of time is at least about 7 days;
identifying and selecting transformed maize tissue that grows in the selection media; and
regenerating a transformed maize plant from the selected transformed maize tissue.